



# DEVELOP STRATEGY FOR ENHANCING EXPORT COMPETITIVENESS FOR AUTO COMPONENT MANUFACTURERS WITH SPECIAL REFERENCE TO AUTO COMPONENT UNITS IN NASIK

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## ABSTRACT

In this research major areas of strategy development for auto component manufacturers to improving competitiveness and export growth in globalised market and are been studied. The purpose of this study is to analyse different aspects of strategy development for enhancing competitiveness and export growth relating to the Indian auto component sector, which is set within a globalised economy. It examines the strategies development for innovation, quality improvement, cost reduction, investment; identify export opportunities and competency development.

**KEY WORDS:** Strategy development, export competitiveness, export growth.

## Introduction

In India also automobile is considered to be a major industry. Government is motivating automobile as well as auto component sector to grow. Indian auto component manufacturing is currently constrained by lack of large capacities. Indian automobile industry is a fragmented industry. There are many small and medium scale industries which are major contributors to this industry. Greater variety in vehicle launches by Original Equipment Manufacturers (OEMs) in recent years and increased export demand are offering newer challenges to manufacturing capabilities and economies of scale of component manufacturers. Due to rising competition and growth potential, the auto component industry has been exposed to many risks of varying intensity. Similarly, the current state of competition also increases risks due to competitive forces. To grow and sustain in this industry the companies have to develop certain strategies.

A firm's competitiveness can be determined on factors such as (i) its own resources (ii) its market power; (iii) its behavior toward rivals and other economic agents; (iv) its capability to adapt to changing circumstances; (v) its capability to create new markets; and (vi) the institutional environment, largely provided by the government, including physical infrastructure and the quality of government policies.

## Objectives

- To study the major areas of strategy development by auto component manufacturers for improving competitiveness in globalised market.
- To study the strategies to enhance export growth in auto component manufacturers.
- To study the key factors of strategy development for auto component manufacturers export competitiveness.

## Hypothesis

H01: There is no association between size of the company and export strategy.

H11: There is association between size of the company and export strategy.

H02: There is no association between period of establishment of the firm and export strategy.

H12: There is association between period of establishment of the firm and export strategy.

H03: There is no association between ownership pattern and export strategy.

H13: There is association between ownership pattern and export strategy.

H04: There is no association between number of employees and export strategy.

H14: There is association between number of employees and export strategy.

H05: There is no effect of strategy development for internal factors for enhancing competitiveness with respect to productivity and exports.

H15: There is an effect of strategy development for internal factors for enhancing competitiveness with respect to productivity and exports.

H06: There is no effect of external factors on strategy development for produc-

tivity and exports.

H16: There is an effect of external factors on strategy development for productivity and exports.

H07: There is no association between strategy development for investment priorities and export competency.

H17: There is association between strategy development for investment priorities and export competency.

H08: There is no association between competency index and export competency.

H18: There is association between competency index and export competency.

H09: There is no effect of strategy development for present cost strategy on export competency.

H19: There is an effect of strategy development for present cost strategy on export competency.

H010: There is no effect of strategy development for present quality strategy on export competency.

H110: There is an effect of strategy development for present quality strategy on export competency

The information of companies selected from Nasik clusters profile is as below: From 50 companies there were 8 companies who didn't export any of their products, 18 companies had low export activities i.e. exports below 25% of their turnover, 18 companies had medium export activities i.e. exports between 25% to 45% of their turnover and 6 companies had exports of above 45% of their turnover.

Other data is grouped according to the impact factor created on the key variables.

**H01: There is no association between size of the company and export strategy.**

The hypothesis is tested against the size of the company and its association with the export activity. Size of the company is classified as Small and medium Enterprise (SME) and Medium enterprise (ME)

To test the above hypothesis Pearson chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 32.639

Degree of Freedom : 3

Table Value : 7.82

**Result of Test : Rejected 277**

The Chi-square calculated value is (32.639) is more than the table value (7.82.) This indicates that the Null Hypothesis (H01) is rejected that is: **There is an association between size of the company and export strategy.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between size of the company and export strategy.

**Null Hypothesis H01: There is no association between the size of the company and export strategy.**

For testing the above Null Hypothesis size of the company were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : 7.655

Table Value of F-test at 5% I.o.c. : 3.84

**Result of Test : Rejected**

The above table indicates that the calculated F-value (7.655) is more than table value (3.84) at 5% level of significance. This indicates that Null Hypothesis (H01) is rejected that is: **There is an association between the size of the company and export strategy.**

**H02: There is no association between period of establishment of the firm and export strategy. 278**

This hypothesis considers the association of the period in which the companies are established with exports. The period of establishment is grouped as companies established before 1990, companies established in the period of 1990 – 2000 and companies established after 2000. To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 27.222

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (27.222) is more than the table value (12.59). This indicates that the Null Hypothesis (H02) is rejected that is: **There is association between year of establishment of the company and export strategy**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between the year of establishment and exports.

**Null Hypothesis H02: There is no association between year of establishment of the company and export strategy. 279**

For testing the above Null Hypothesis year of establishment were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : 2.840

Table Value of F-test at 5% I.o.c. : 3.00

**Result of Test : Accepted**

The above table indicates that the calculated F-value (2.840) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H02) is accepted that is: **There is no association between year of establishment of the company and export strategy.**

**H03: There is no association between ownership pattern and export strategy.**

This hypothesis considers the association of ownership pattern with exports. The ownership pattern is classified as Proprietary, Partnership and Private limited companies.

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 27.642

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected 280**

The Chi-square calculated value is (27.642) is more than the table value (12.59).

This indicates that the Null Hypothesis (H03) is rejected that is: **There is an association between ownership pattern and export strategy.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between the ownership pattern and exports.

**Null Hypothesis H03: There is no association between ownership pattern and export strategy.**

For testing the above Null Hypothesis ownership pattern was tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : 17.003

Table Value of F-test at 3% I.o.c. : 3.00

**Result of Test : Rejected**

The above table indicates that the calculated F-value (17.003) is more than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H03) is rejected that is: **There is an association between ownership pattern and export strategy.**

**H04: There is no association between number of employees and export strategy. 281**

This hypothesis considers the association of number of employees in the companies established with exports. The number of employees is categorised as companies having employees below 100, companies having employees between 101 to 200, companies having employees between 201 to 300 and companies having employees above 301. To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 10.872

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Accepted**

The Chi-square calculated value is (10.872) is less than the table value (12.59). This indicates that the Null Hypothesis (H04) is accepted that is: **There is no association between the number of employees and export strategy.**

**H05 : There is no effect of strategy development for internal factors for enhancing competitiveness w.r.t productivity and export.**

The internal factors considered are as below:

Training and development activities, Capacity utilization, Quality consciousness, Financial position, Internal growth conducive environment

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 21.722

Degree of Freedom : 6

Table Value : 12.59

**Result of Test : Rejected**

The Chi-square calculated value is (21.722) is more than the table value (12.59). This indicates that the Null Hypothesis (H05) is rejected that is: **There is an effect of strategy development for internal factors for enhancing competitiveness w.r.t productivity and export.**

**Anova**

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between the internal factors on productivity and exports. 283

**Null Hypothesis H05: There is no effect of strategy development for internal factors for enhancing competitiveness w.r.t productivity and export.**

For testing the above Null Hypothesis internal factors were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : 12.036

Table Value of F-test at 5% I.o.c. : 3.00

#### Result of Test : Rejected

The above table indicates that the calculated F-value (12.036) is more than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H05) is rejected that is: **There is an effect of strategy development for internal factors for enhancing competitiveness w.r.t productivity and export.**

#### H06 : There is no effect of external factors on strategy development for productivity and export.

The external factors considered are as below:

Supply of sufficient funds, Availability of technical manpower, Support from the customers, Government support, Vendor development

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 25.829

Degree of Freedom : 6

Table Value : 12.59

#### Result of Test : Rejected

The Chi-square calculated value is (25.829) is more than the table value (12.59). This indicates that the Null Hypothesis (H06) is rejected that is: **There is an effect of external factors on strategy development for productivity and export.**

#### Anova

As the above Null Hypothesis got rejected, the study was set to have ANOVA table and F- test in order to ascertain the Score of association between the external factors on productivity and exports.

#### Null Hypothesis H06: There is no effect of external factors on strategy development for productivity and export. 285

For testing the above Null Hypothesis external factors were tested by ANOVA technique the result are shown in the table below:

Calculated Value of F-test : 11.925

Table Value of F-test at 5% I.o.c. : 3.00

#### Result of Test : Rejected

The above table indicates that the calculated F-value (11.925) is less than table value (3.00) at 5% level of significance. This indicates that Null Hypothesis (H06) is rejected that is: **There is an effect of external factors on strategy development for productivity and export.**

#### H07: There is no association between strategy development for investment priorities and export competency.

The investment priorities considered are as below:

R & D, Automation process, Training of employees, Welfare of employees, Market research activities, Advertisement

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 9.014

Degree of Freedom : 6

Table Value : 12.59

#### Result of Test : Accepted

The Chi-square calculated value is (9.014) is less than the table value (12.59). This indicates that the Null Hypothesis (H07) is accepted that is: **There is no association between strategy development for investment priorities and export competency.**

#### H08: There is no association between competency index and export competency

The factors for competitive index considered are as below: Factors for competitive index

R & D, Changing in Target market, Adoption of technology, Marketing budget, Strategic alliance, Employee stability

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 3.688

Degree of Freedom : 6

Table Value : 12.59

#### Result of Test : Accepted

The Chi-square calculated value is (3.688) is less than the table value (12.59). This indicates that the Null Hypothesis (H08) is accepted that is: **There is no association between competency index and export competency**

H09 : There is no effect of strategy development for present cost strategy on export competency.

The cost strategy considered is as below: Cost strategy

Reduction of inventory level, Rejection rate (parts per million), Automation, Vendor development

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 4.685

Degree of Freedom : 6

Table Value : 12.59

#### Result of Test : Accepted

The Chi-square calculated value is (4.685) is less than the table value (12.59). This indicates that the Null Hypothesis (H09) is accepted that is: **There is no effect of strategy development for present cost strategy on export competency.**

#### H010 : There is no effect of strategy development for present quality strategy on export competency.

The strategies for quality considered are as below:

Maintenance, Improve product design, R & D, Employees training

To test the above hypothesis chi-square test is applied and the result of the test is as follows:

Calculated Chi-square value : 5.370

Degree of Freedom : 6

Table Value : 12.59

#### Result of Test : Accepted

The Chi-square calculated value is (5.370) is less than the table value (12.59). This indicates that the Null Hypothesis (H010) is accepted that is: **There is no effect of strategy development for present quality strategy on export competency.**

Recommendations for strategy development for enhancing export competitiveness

- R&D expenditure should be more which is observed low in the auto-component companies which were considered for the study. Most of the small scale auto-component firms and a few of the medium scale ones do not have an in-house R&D facility. It is been observed that R & D is one of the major factor for measuring competitiveness in auto component companies, especially because of increase in competition and growing needs of customers. It is also an important strategy which improves quality. So companies need to focus for proper strategy development of R & D activity. Companies can also set up combined R & D department which can be product wise for the clusters.
- Majority of the companies in the research have the problem of under utilisation of its production capacity which they have to do to avoid breakdown. Many companies have same requirement of machinery and technology. Strategy development for resource sharing for costly machinery with companies in cluster may also be considered. It will reduce the financial burden and proper utilisation of unused resources will be done. They can share it

with other companies for optimum utilisation.

- Benchmarking should be done with the companies having good growth. This will motivate the companies and will keep them competitive from time to time.
- Smaller auto component firms covered in our study, reported that the major constraint for them for growth is lack of credit availability. Hence improving credit availability is critically important for auto-components.
- It has been observed that firms that produce more than one product have significantly higher market share and are more sustainable in market than those that produce just one product. This is because the extra product acts as a buffer against any problem. Hence, product diversification also enhances competitiveness. So strategy development to increase the number of products should be considered.
- Use of latest technology machines helps to compete in the global market. Strategy should be developed to upgrade the technology from time to time to be competitive in the global market.
- There are many companies who rate the companies. There should be awareness created among companies about the need for getting credit worthiness rating done. It helps to prove the companies superior than competitors. Hence, strategy development to go in for rating should be done. It has a positive factor for growth and competitiveness.
- Venture Capital Limited can help Indian auto component industry to acquire high-end technology and manufacturing facilities outside India which will help the companies to compete with the developed countries.
- Expansion and diversification will help enter into new untapped markets. It would be difficult for these SME's companies, which are largely based on traditional management practices and limited resources. The SMEs can exploit these opportunities by developing strategies like joint ventures, collaboration and technical tie ups.
- Workforce need to change their attitude to increase productivity. The companies should conduct motivational workshops for the employees as they are the major factor of production

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